



Complete Summary

TITLE

Osteoarthritis: percentage of patients with hip or knee osteoarthritis and worsening complaints accompanied by a progressive decrease in activities and no previous radiographs during the preceding 3 months for whom a knee or hip radiograph is performed within 3 months.

SOURCE(S)

MacLean CH, Saag KG, Solomon DH, Morton SC, Sampsel S, Klippel JH. Measuring quality in arthritis care: methods for developing the Arthritis Foundation's quality indicator set. Arthritis Rheum 2004 Apr 15;51(2):193-202. [PubMed](#)

Pencharz JN, MacLean CH. Measuring quality in arthritis care: the Arthritis Foundation's Quality Indicator set for osteoarthritis. Arthritis Rheum 2004 Aug 15;51(4):538-48. [108 references] [PubMed](#)

Measure Domain

PRIMARY MEASURE DOMAIN

Process

The validity of measures depends on how they are built. By examining the key building blocks of a measure, you can assess its validity for your purpose. For more information, visit the [Measure Validity](#) page.

SECONDARY MEASURE DOMAIN

Does not apply to this measure

Brief Abstract

DESCRIPTION

This measure is used to assess percentage of patients with hip or knee osteoarthritis and worsening complaints accompanied by a progressive decrease in activities and no previous radiographs during the preceding 3 months for whom a knee or hip radiograph is performed within 3 months.

RATIONALE

Radiographs will help define the extent of the osteoarthritis and rule out other causes of pain and functional limitation, including fracture and avascular necrosis.

PRIMARY CLINICAL COMPONENT

Osteoarthritis; radiographs

DENOMINATOR DESCRIPTION

Patients with hip or knee osteoarthritis and worsening complaints accompanied by a progressive decrease in activities and no previous radiographs during the preceding 3 months

NUMERATOR DESCRIPTION

Patients for whom a knee or hip radiograph is performed within 3 months

Evidence Supporting the Measure

EVIDENCE SUPPORTING THE CRITERION OF QUALITY

- A formal consensus procedure involving experts in relevant clinical, methodological, and organizational sciences

Evidence Supporting Need for the Measure

NEED FOR THE MEASURE

Unspecified

State of Use of the Measure

STATE OF USE

Current routine use

CURRENT USE

Internal quality improvement

Application of Measure in its Current Use

CARE SETTING

Ambulatory Care
Ancillary Services
Physician Group Practices/Clinics

PROFESSIONALS RESPONSIBLE FOR HEALTH CARE

Advanced Practice Nurses
Physician Assistants
Physicians

LOWEST LEVEL OF HEALTH CARE DELIVERY ADDRESSED

Individual Clinicians

TARGET POPULATION AGE

Unspecified

TARGET POPULATION GENDER

Either male or female

STRATIFICATION BY VULNERABLE POPULATIONS

Unspecified

Characteristics of the Primary Clinical Component**INCIDENCE/PREVALENCE**

Osteoarthritis (OA) is the most common form of arthritis. It is a degenerative joint disease that affects about 12% of the general population, with prevalence increasing with age. Between 60% and 70% of individuals aged 65 years or older show radiographic changes consistent with OA, and about half of these meet classification criteria for the disease by reporting joint pain or stiffness.

EVIDENCE FOR INCIDENCE/PREVALENCE

Hawker G. Epidemiology of arthritis and osteoporosis. 1st ed. Toronto (ON): Institute for Clinical Evaluative Sciences (ICES); 1998.

Lawrence RC, Helmick CG, Arnett FC, Deyo RA, Felson DT, Giannini EH, Heyse SP, Hirsch R, Hochberg MC, Hunder GG, Liang MH, Pillemer SR, Steen VD, Wolfe F. Estimates of the prevalence of arthritis and selected musculoskeletal disorders in the United States. *Arthritis Rheum* 1998 May;41(5):778-99. [PubMed](#)

ASSOCIATION WITH VULNERABLE POPULATIONS

See "Incidence/Prevalence" field.

BURDEN OF ILLNESS

Pain and disability are the most common consequences of osteoarthritis (OA) joint damage.

EVIDENCE FOR BURDEN OF ILLNESS

Felson DT, Lawrence RC, Dieppe PA, Hirsch R, Helmick CG, Jordan JM, Kington RS, Lane NE, Nevitt MC, Zhang Y, Sowers M, McAlindon T, Spector TD, Poole AR, Yanovski SZ, Ateshian G, Sharma L, Buckwalter JA, Brandt KD, Fries JF. Osteoarthritis: new insights. Part 1: the disease and its risk factors. Ann Intern Med 2000 Oct 17;133(8):635-46. [120 references] [PubMed](#)

UTILIZATION

Unspecified

COSTS

Unspecified

Institute of Medicine National Healthcare Quality Report Categories

IOM CARE NEED

Living with Illness

IOM DOMAIN

Effectiveness
Timeliness

Data Collection for the Measure

CASE FINDING

Users of care only

DESCRIPTION OF CASE FINDING

Patients with hip or knee osteoarthritis and worsening complaints accompanied by a progressive decrease in activities and no previous radiographs during the preceding 3 months

DENOMINATOR SAMPLING FRAME

Patients associated with provider

DENOMINATOR INCLUSIONS/EXCLUSIONS

Inclusions

Patients with hip or knee osteoarthritis and worsening complaints accompanied by a progressive decrease in activities and no previous radiographs during the preceding 3 months

Exclusions

Unspecified

RELATIONSHIP OF DENOMINATOR TO NUMERATOR

All cases in the denominator are equally eligible to appear in the numerator

DENOMINATOR (INDEX) EVENT

Clinical Condition

DENOMINATOR TIME WINDOW

Time window precedes index event

NUMERATOR INCLUSIONS/EXCLUSIONS**Inclusions**

Patients for whom a knee or hip radiograph is performed within 3 months

Exclusions

Unspecified

MEASURE RESULTS UNDER CONTROL OF HEALTH CARE PROFESSIONALS, ORGANIZATIONS AND/OR POLICYMAKERS

The measure results are somewhat or substantially under the control of the health care professionals, organizations and/or policymakers to whom the measure applies.

NUMERATOR TIME WINDOW

Fixed time period

DATA SOURCE

Administrative and medical records data
Administrative and provider data
Administrative data
Administrative data and patient survey
Medical record

LEVEL OF DETERMINATION OF QUALITY

Individual Case

PRE-EXISTING INSTRUMENT USED

Unspecified

Computation of the Measure**SCORING**

Rate

INTERPRETATION OF SCORE

Better quality is associated with a higher score

ALLOWANCE FOR PATIENT FACTORS

Unspecified

STANDARD OF COMPARISON

Internal time comparison

Evaluation of Measure Properties**EXTENT OF MEASURE TESTING**

A multidisciplinary expert panel comprised of nationally recognized experts discussed and rated the validity of each of the proposed measures based on the evidence and their expert opinion using a modification of the RAND/UCLA Appropriateness Method.

EVIDENCE FOR RELIABILITY/VALIDITY TESTING

MacLean CH, Saag KG, Solomon DH, Morton SC, Sampsel S, Klippel JH. Measuring quality in arthritis care: methods for developing the Arthritis Foundation's quality indicator set. Arthritis Rheum 2004 Apr 15;51(2):193-202. [PubMed](#)

Pencharz JN, MacLean CH. Measuring quality in arthritis care: the Arthritis Foundation's Quality Indicator set for osteoarthritis. Arthritis Rheum 2004 Aug 15;51(4):538-48. [108 references] [PubMed](#)

Identifying Information**ORIGINAL TITLE**

Quality indicator 14. Radiographs.

MEASURE COLLECTION

[The Arthritis Foundation's Quality Indicator Project](#)

MEASURE SET NAME

[The Arthritis Foundation's Quality Indicator Set for Osteoarthritis](#)

SUBMITTER

Arthritis Foundation

DEVELOPER

Arthritis Foundation
RAND Health

ADAPTATION

Measure was not adapted from another source.

RELEASE DATE

2004 Aug

MEASURE STATUS

This is the current release of the measure.

SOURCE(S)

MacLean CH, Saag KG, Solomon DH, Morton SC, Sampsel S, Klippel JH. Measuring quality in arthritis care: methods for developing the Arthritis Foundation's quality indicator set. Arthritis Rheum 2004 Apr 15;51(2):193-202. [PubMed](#)

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MEASURE AVAILABILITY

The individual measure, "Quality Indicator 14. Radiographs," is published in "Measuring Quality in Arthritis Care: The Arthritis Foundation's Quality Indicator Set for Osteoarthritis."

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NQMC STATUS

This NQMC summary was completed by ECRI on August 24, 2006. The information was verified by the measure developer on November 6, 2006.

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